



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,016	07/21/2003	Jun Takagi	AA536XC&	5747

27752 7590 12/04/2006

THE PROCTER & GAMBLE COMPANY  
INTELLECTUAL PROPERTY DIVISION  
WINTON HILL BUSINESS CENTER - BOX 161  
6110 CENTER HILL AVENUE  
CINCINNATI, OH 45224

EXAMINER

BOGART, MICHAEL G

ART UNIT	PAPER NUMBER
----------	--------------

3761

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

88

<b>Office Action Summary</b>	<b>Application No.</b> 10/624,016	<b>Applicant(s)</b> TAKAGI ET AL.	
	<b>Examiner</b> Michael G. Bogart	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections – 35 USC § 102/103*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Art Unit: 3761

Claims 1, 2, 4, 5, 7, 8 and 10 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Penska (US 3,101,714).

Regarding claim 1, Penska teaches a catamenial tampon comprising:

a primary absorbent member (10); and

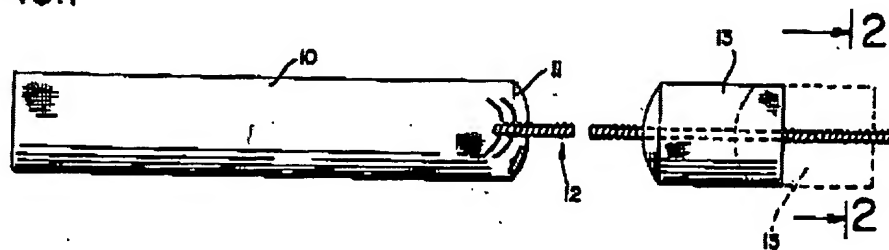
a withdrawal cord (12, 13) having a withdrawal portion and an attachment portion, the attachment portion being joined to the primary absorbent member (10);

the withdrawal cord (12, 13) including a composite yarn (13, 14, 16) which includes a continuous string (14, 16), and a secondary absorbent member (13) joined to a part of the continuous string (14, 16) and the primary absorbent member (10);

wherein the continuous string (14, 16) and secondary absorbent member (13) are a single piece of the composite yarn.

wherein the continuous string (14, 16) which has the secondary absorbent member (13) joined thereto is in the final product identical to a string woven according to a predetermined weaving manner after being provisionally twisted, thereby forming the attachment portion and the withdrawal portion (see figure 1, below).

FIG. 1



As interpreted herein, "composite" means made up of distinct parts (see Merriam Webster's Collegiate Dictionary 10<sup>th</sup> Edition, 1993).

Regarding the limitation where the secondary absorbent member is joined to a part of the continuous string and the primary absorbent member, applicants' specification at page 4 defines the terms "join" or "joined" as encompassing elements which are indirectly affixed to each other by an intermediate member. The disclosure of Penska meets this definition of joined by having absorbent member (13) joined to absorbent member (10) via cord (12).

The limitation concerning how the string is woven and twisted make claim 1 a product-by-process claim.

Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps.

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted).

Once a product appearing to be substantially identical is found and a 35 USC § 102/103 rejection is made, the burden shifts to the applicant to show an unobvious difference. MPEP § 2113.

Penska teaches a string that is structurally identical to the invention as claimed whether or not the cords (14) are woven (stitched (16)) together before or after they are twisted (see figure 3, below).

Regarding interpretation of the claims, particularly in light of the new limitations concerning the continuous string and absorbent member being a single piece of yarn, applicants' employ the transitional phrase "comprising." The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., *Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004) ("like the term comprising, the terms containing and mixture are open-ended."). *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003) ("The transition comprising in a method claim indicates that the claim is open-ended and allows for additional steps."). MPEP § 2111.03.

Regarding claim 2, Penska teaches a continuous string (14) woven in a twisting-tubular manner.

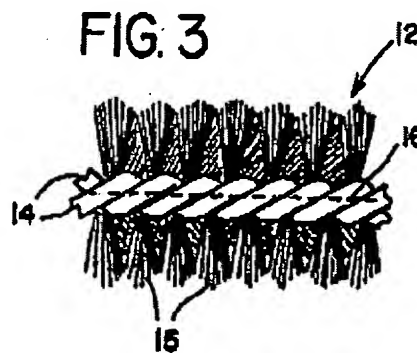
Regarding claims 4 and 5, Penska teaches that the attachment portion of the withdrawal cord (12) is stitched (11, 16) to the primary absorbent member (10) such that it is structurally identical to a stitched attachment made according to a predetermined stitching;

and further wherein at least a part of the withdrawal portion of the withdrawal cord (12) is additionally stitched (11, 16) such that it is structurally identical to a stitched attachment according to the predetermined stitching manner. See *In re Thorpe*, supra.

Regarding claims 7 and 8, Penska teaches that the withdrawal cord (12) has a wicking mechanism (15) which wicks a fluid upwardly toward the primary absorbent member (10); and

wherein the wicking mechanism is a hydrophilicity gradient, a density gradient or a capillary gradient formed in the withdrawal cord (12) due to the absorbent tufts (15)(col. 1, lines 63-70; col. 2, lines 26-37).

Regarding claim 10, Penska teaches a plurality of strings (14)(see figure 3, below).



Claims 1 and 3 are rejected under 35 U.S.C. § 102(e) as being anticipated by Taylor *et al.* (US 6,258,075 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. § 102(e). This rejection under 35 U.S.C. § 102(e) might be overcome either by a showing under 37 CFR § 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR § 1.131.

Regarding claim 1, Taylor *et al.* teach teaches a catamenial tampon (20) comprising:  
a primary absorbent member (21); and  
a withdrawal cord (48, 60) having a withdrawal portion (48) and an attachment portion (60), the attachment portion (60) being joined to the primary absorbent member (21);

Art Unit: 3761

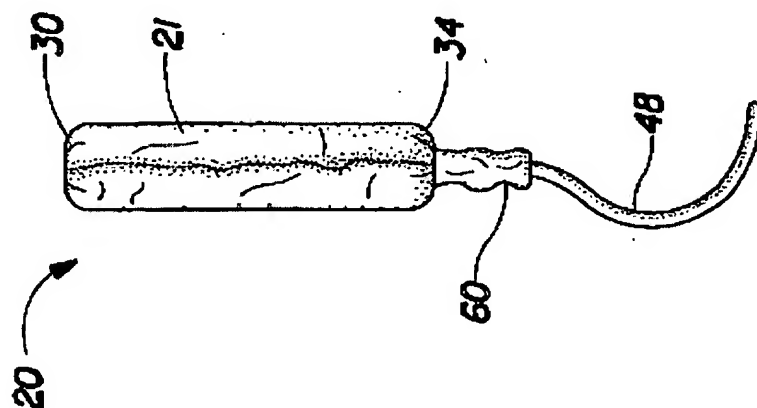
the withdrawal cord (48, 60) including a composite yarn which includes a continuous string (48), and a secondary absorbent member (60) joined to a part of the continuous string (48) and the primary absorbent member (21);

wherein the continuous string (48) and secondary absorbent member (60) are a single piece of the composite yarn (48, 60); and

wherein the continuous string (48) which has the secondary absorbent member (60) joined thereto is in the final product identical to a string woven according to a predetermined weaving (sewing or stitched) manner after being provisionally twisted, thereby forming the attachment portion and the withdrawal portion (see figure 1, below). See *In re Thorpe*, supra.

As interpreted herein, "composite" means made up of distinct parts.

Regarding the interpretation that Taylor *et al.* teach an end product that has an identical string and stitched attachment to that of the claimed invention, Taylor *et al.* teach that the string (48) is sewed (stitched) to the main body (21)(col. 7, line 48). If the presumably non-twisted withdrawal string of the reference were sewed to the main body while the string was in a gently twisted state, it would untwist itself after attachment to the body as it returned to its naturally untwisted state, making the end product identical to the claimed invention.

**FIG. 1**



Regarding claim 3, Taylor *et al.* teach a diameter ration of the attachment portion (60) to the withdrawal portion (48) of the withdrawal cord (48, 60) is at least about 1.5 (figure 1).

Claims 1 and 3 are rejected under 35 U.S.C. § 102(a) as being anticipated by Taylor *et al.* (WO 00/61052 A1).

In the international patent issued prior to the filing date of the claimed invention, Taylor *et al.* expressly disclose every limitation of claims 1 and 3. There is no common inventor in Taylor *et al.* and the instant invention. This demonstrates that the claimed subject matter was known and used by other prior to the filing date of the instant application.

Claims 1 and 3 are rejected under 35 U.S.C. § 102(f) because the applicant did not invent the claimed subject matter.

As described supra in the rejection under 35 USC § 102(e) over Taylor *et al.* (WO 00/61052 A1) expressly disclose every limitation of claims 1 and 3 in a patent published prior to the filing date of the instant invention. Taylor *et al.* do not share any common inventors with that of the present invention, and thus preclude finding that applicants are the actual inventors of the claimed invention.

### ***Claim Rejections – 35 USC § 103***

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Penska as applied to claims 1, 2, 4, 5, 7, 8 and 10 above, and further in view of Hirayama (US 4,237,804).

Penska does not show double ring stitching according to (JIS) No. B 9070.

Hirayama teaches the use of this standard in industrial sewing (column 3, lines 25-33).

Art Unit: 3761

At the time of the invention, it would have been obvious to one of ordinary skill in the art to apply the double stitching technique of Hirayama to construct the tampon of Penska as this type of stitch provides a very secure attachment.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Penska as applied to claims 1, 2, 4, 5, 7, 8 and 10 above, in view of Brinker (US 5,592,725 A).

Penska does not teach an absorbent member comprising fleece.

Brinker teaches a tampon having an absorbent member comprising fleece (abstract).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to select fleece to construct the second absorbent member of Penska with fleece as taught by Brinker as the material is widely available, is an effective absorbent and is inexpensive.

### ***Response to Arguments***

Applicant's arguments filed 03 April 2006 have been fully considered but they are not persuasive.

Regarding the rejection of claims 1, 2, 4, 5 and 7-10, applicants assert that Penska fails to disclose a secondary absorbent member joined to a part of a continuous string and the primary absorbent member. This argument is not persuasive because applicants specification at page 4 encompasses a definition of "joined" that encompasses elements that are indirectly affixed via an intermediate element. Using this definition to interpret the claims in view of the device of Penska, that device reads upon absorbent elements that are indirectly joined by an intermediate element. The fact that the secondary absorbent member is frictionally attached to the cord does not preclude the interpretation that it is attached to the cord.

Regarding the rejections under 35 USC § 102(e)/102(a)/102(f), applicants assert that Taylor or WO 00/ 61052 A1 do not teach a secondary absorbent member and continuous string form from a single piece of composite yarn. As described in the detailed rejection supra, the absorbent structure (60) is considered to be a subcomponent of the withdrawal cord (48, 60) and composite yarn (48, 60). As interpreted herein, “composite” means made up of distinct parts. Furthermore, applicants employ the transitional phrase “comprising” which does not preclude additional elements. (See detailed rejections, supra) Although applicants recite a single string, additional strings, absorbent pieces etc. may be added and the structure will still read upon the instantly claimed invention.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that there is nothing in Penska that suggests modifying the attachment of the secondary absorbent member to the primary absorbent member using the stitching of Hirayama) are not recited in the rejected claim(s). None of claims 1, 4 or 6 are directed towards how the secondary absorbent member is attached to the cord or primary absorbent member. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants assert that Hirayama does not show use of the stitching methods for tampons. Hirayama is applied as a secondary reference which teaches the stitching technique. The technique is suitable for a variety of textiles, which while not mentioned specifically in the reference, includes absorbent articles such as tampons. There is nothing in the reference to suggest how that stitching technique is not as suited for tampons as other textiles.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bogart whose telephone number is (571) 272-4933.

In the event the examiner is not available, the Examiner's supervisor, Tatyana Zalukaeva may be reached at phone number (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for formal communications. For informal communications, the direct fax to the Examiner is (571) 273-4933.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 3761

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Bogart  
20 November 2006

TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

